

FIG. 1

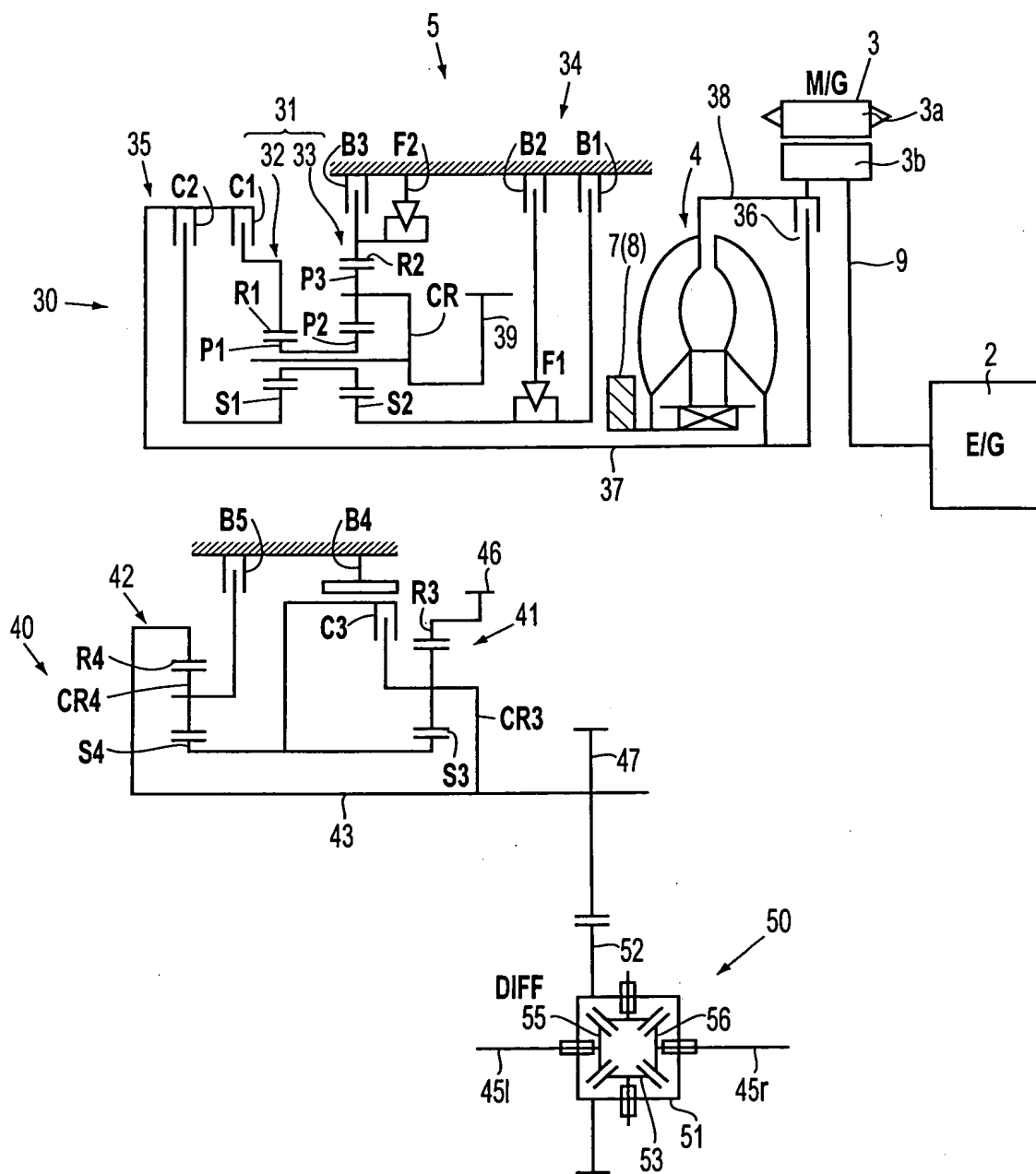


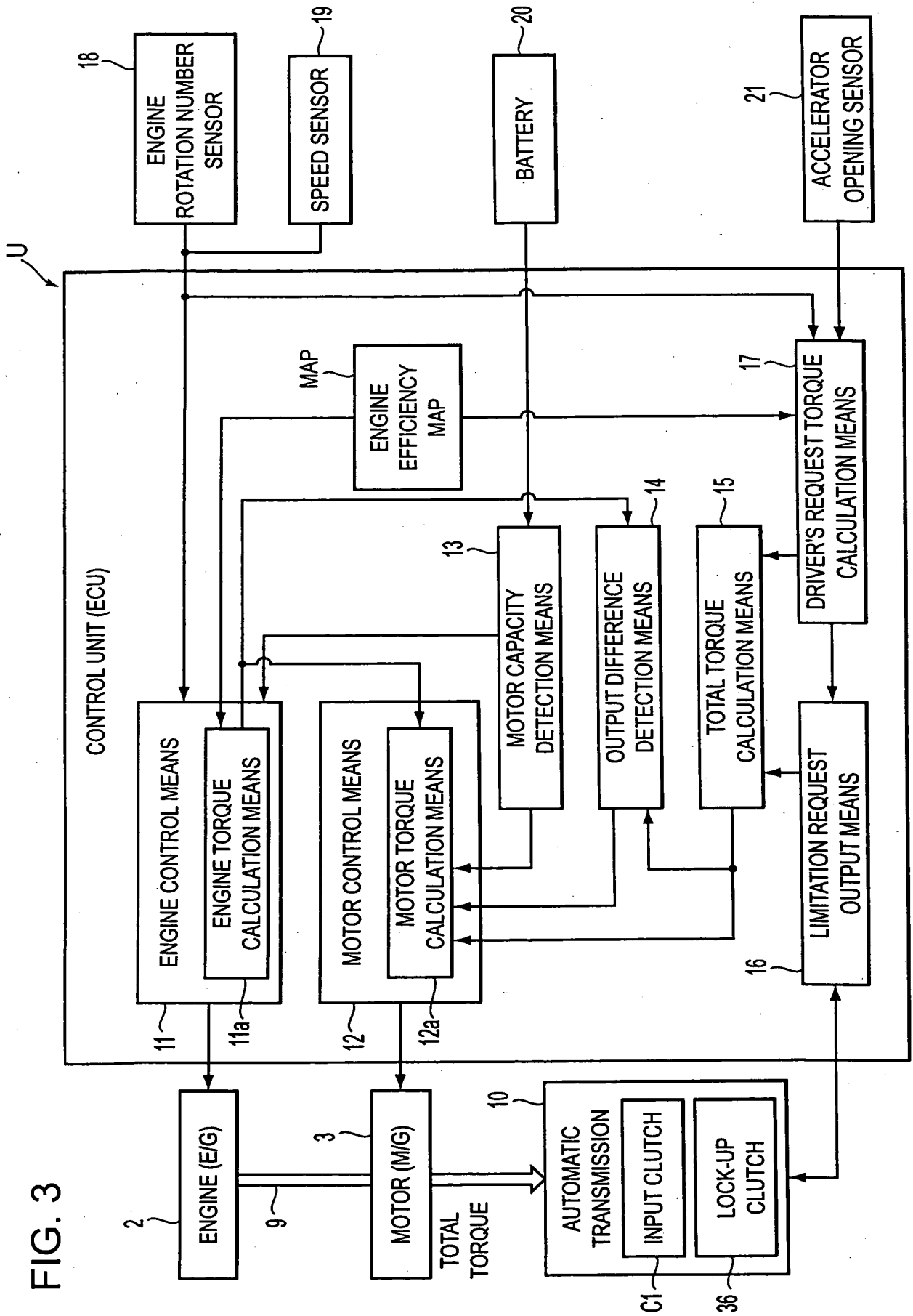
FIG. 2(A)

	C1	C2	C3	B1	B2	B3	B4	B5	F1	F2
N								○		
1ST	○					△		○		○
2ND	○			△	○			○	○	
3RD	○			△	○		○		○	
4TH	○		○	△	○				○	
5TH	○	○	○							
REV		○				○		○		

FIG. 2(B)

FIG. 3

The diagram illustrates a vehicle control system (FIG. 3) where an engine (2) and a motor (3) are connected via a shaft (9) to a common output shaft (10). The output shaft (10) is coupled to an automatic transmission (10), which includes an input clutch (C1) and a lock-up clutch (36). A control unit (ECU) (1) is connected to the engine (2) and the motor (3). The ECU (1) contains several functional blocks: engine control means (11), engine torque calculation means (11a), motor control means (12), motor torque calculation means (12a), motor capacity detection means (13), output difference detection means (14), total torque calculation means (15), driver's request torque calculation means (17), and limitation request output means (16). The ECU (1) also receives inputs from an engine rotation number sensor (18), a speed sensor (19), a battery (20), and an accelerator opening sensor (21). The ECU (1) outputs control signals to the engine (2) and the motor (3). The engine torque calculation means (11a) receives input from the engine rotation number sensor (18). The motor torque calculation means (12a) receives input from the speed sensor (19). The motor capacity detection means (13) receives input from the battery (20). The output difference detection means (14) receives input from the engine torque calculation means (11a) and the motor torque calculation means (12a). The total torque calculation means (15) receives input from the output difference detection means (14). The driver's request torque calculation means (17) receives input from the accelerator opening sensor (21). The limitation request output means (16) receives input from the total torque calculation means (15) and the driver's request torque calculation means (17). The limitation request output means (16) outputs a signal to the input clutch (C1) and the lock-up clutch (36).



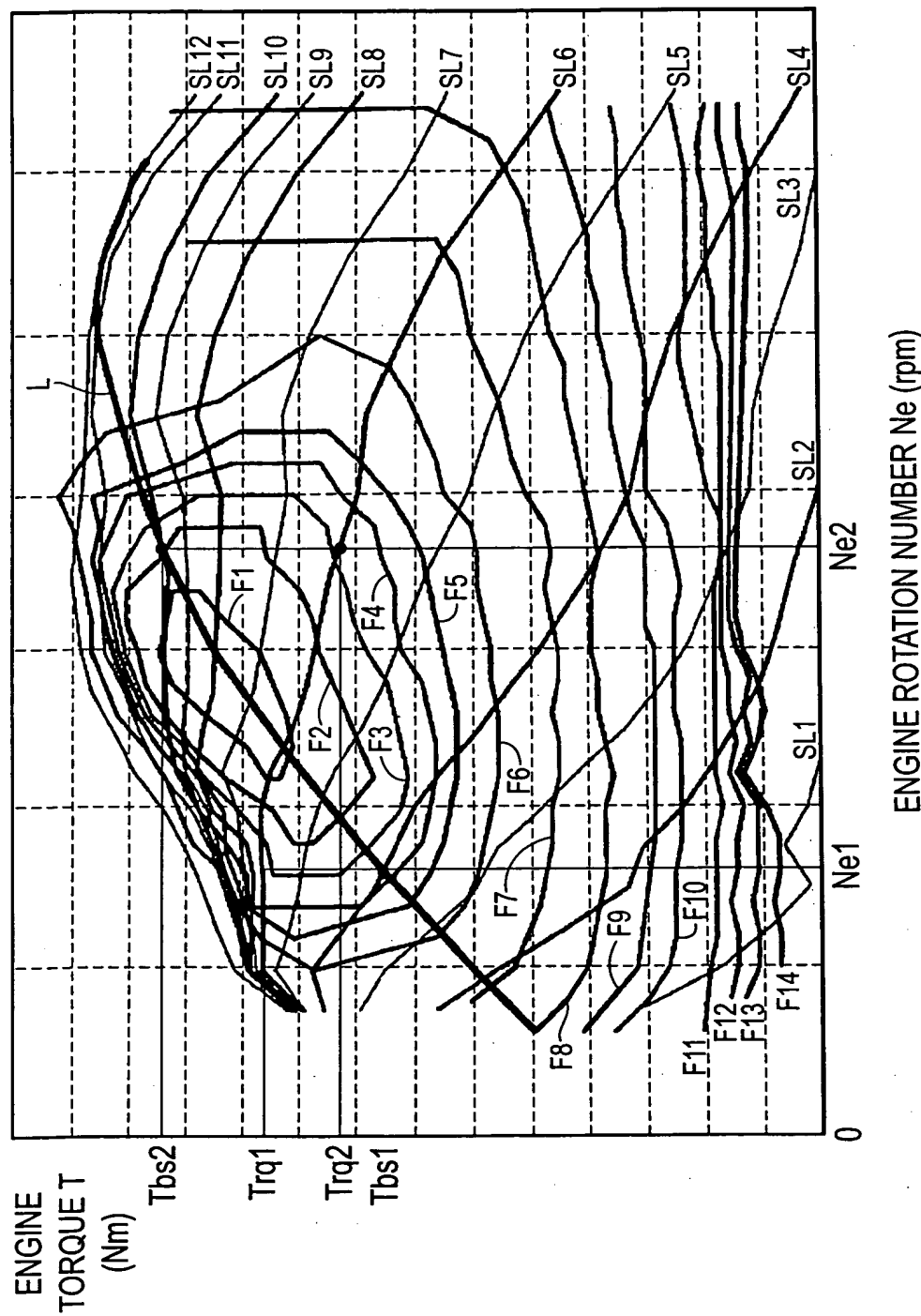
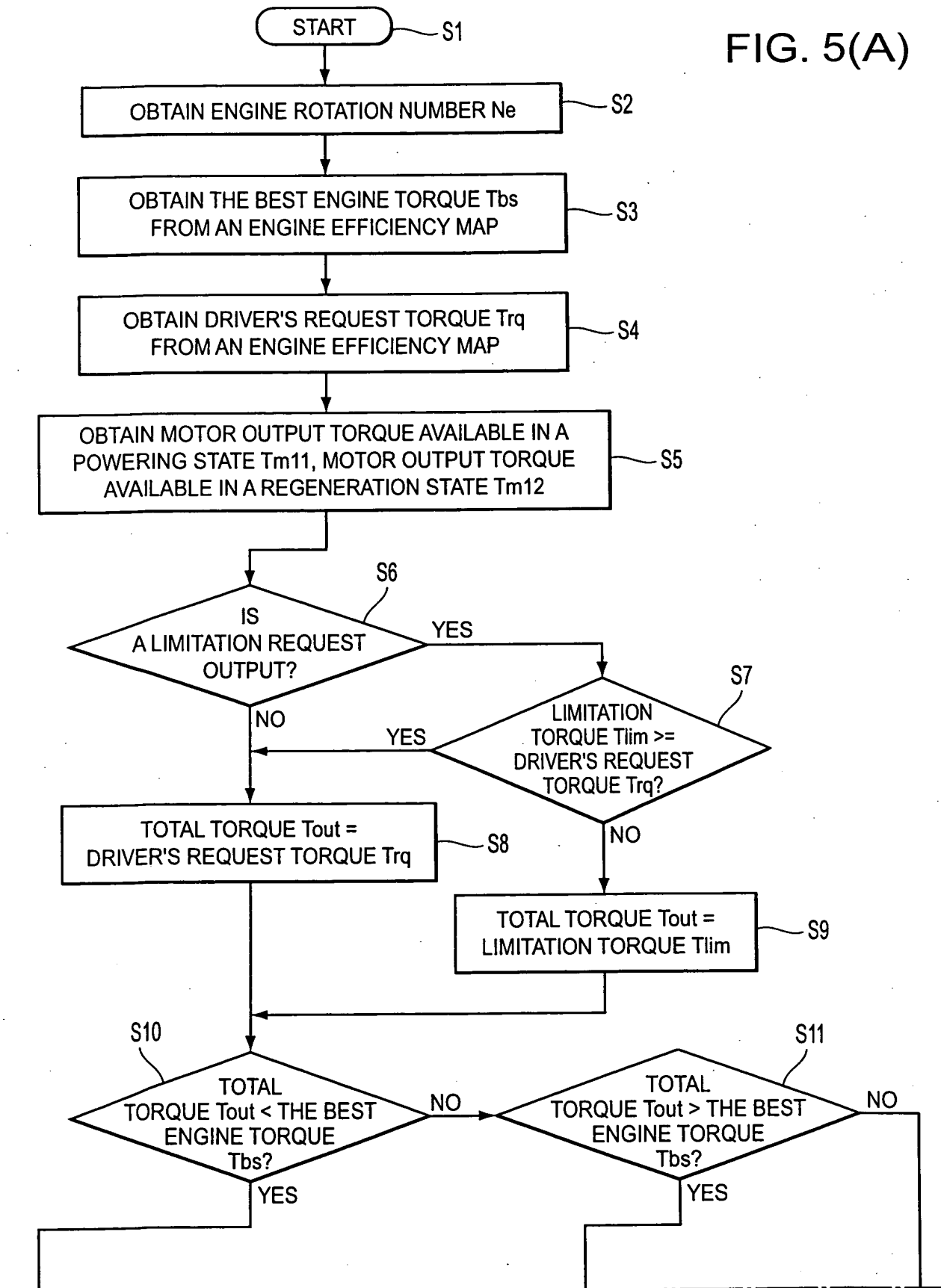


FIG. 4

FIG. 5(A)



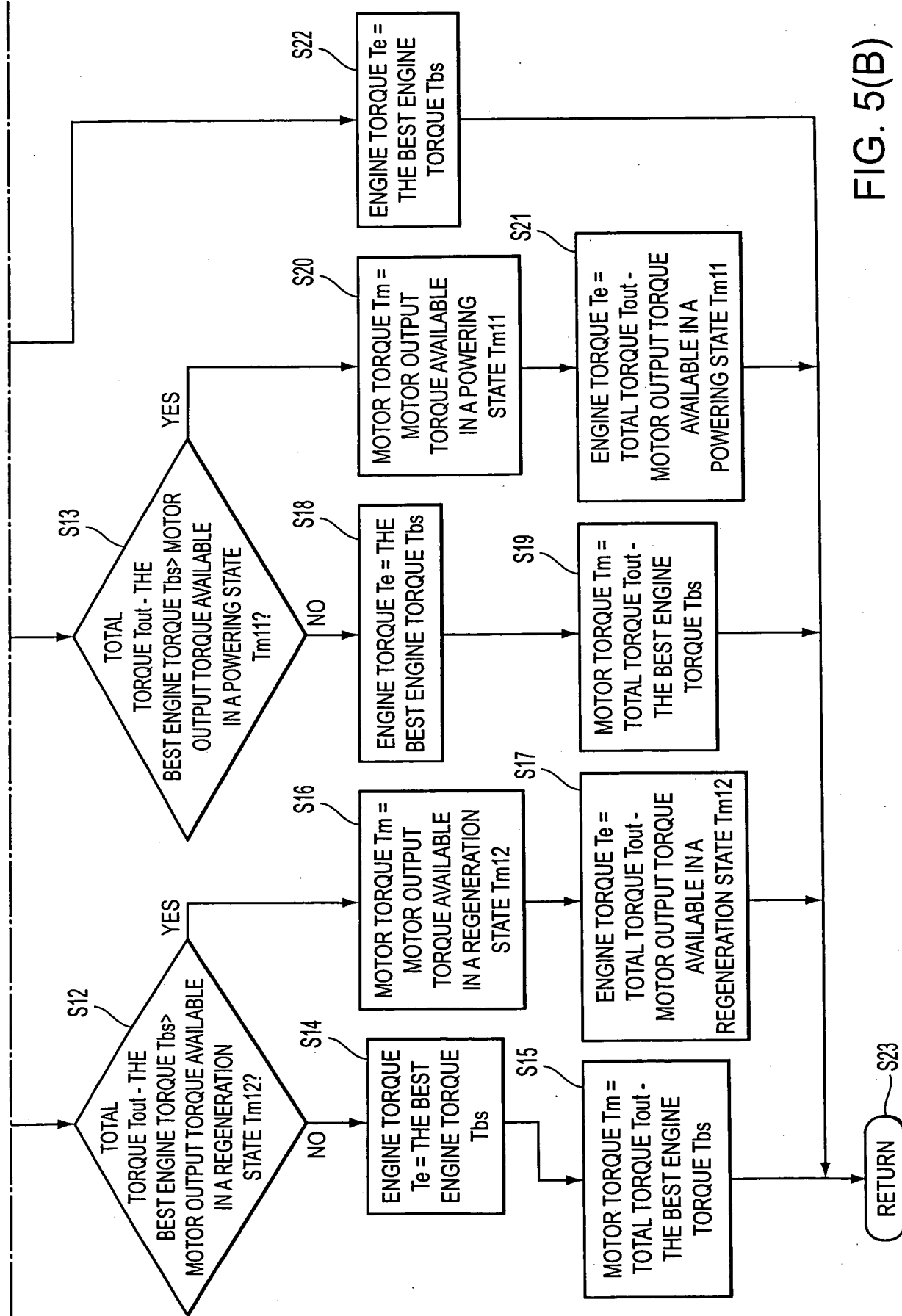


FIG. 5(B)

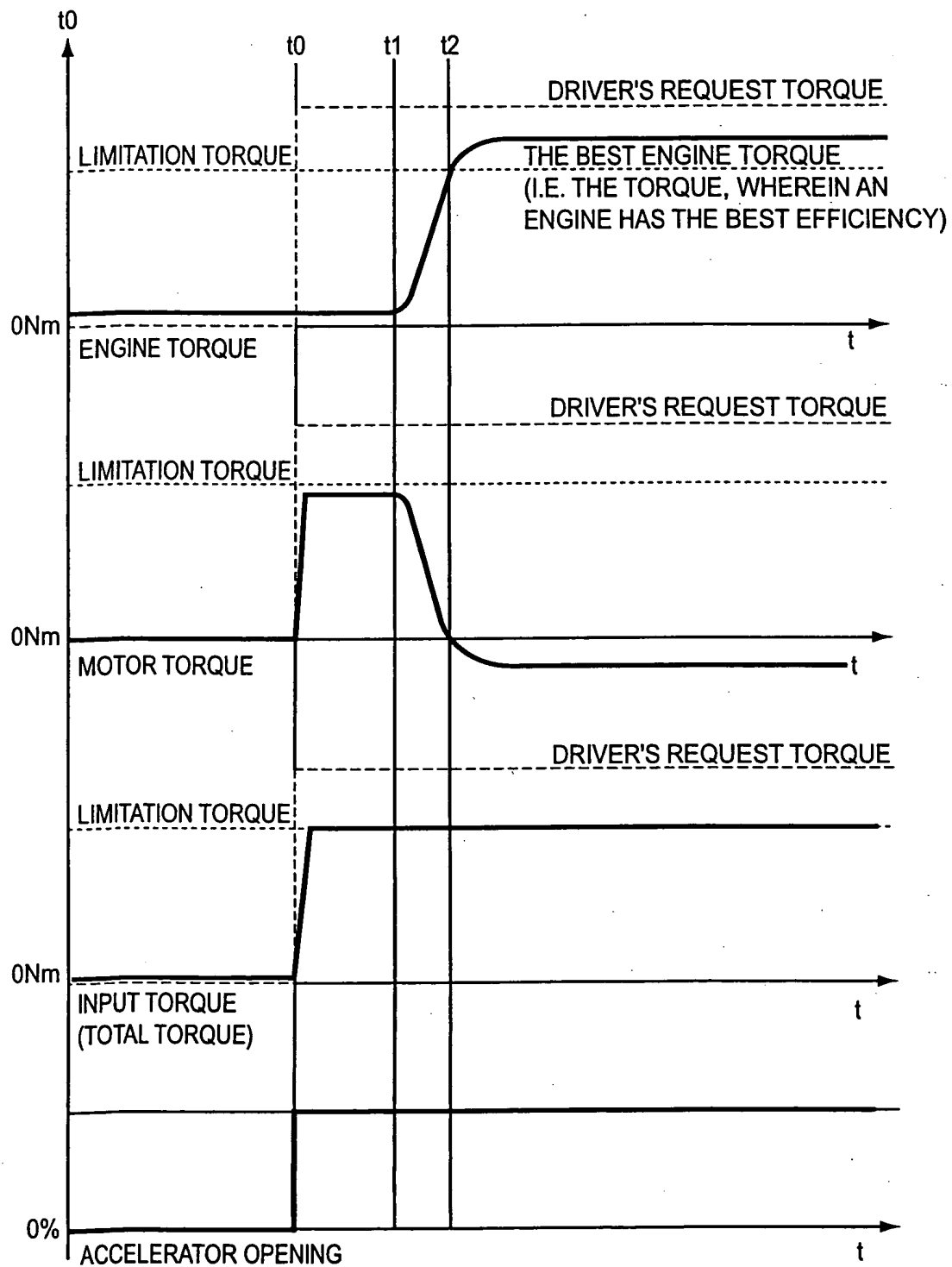


FIG. 6